

U.S. Patent Application Serial No. 10/782,821
Amendment filed October 15, 2008
Reply to OA dated July 9, 2008

AMENDMENT TO THE SPECIFICATION:

Please amend the specification as follows:

Please replace the paragraph beginning on page 12 line 7 with the following rewritten paragraph:

When a ring-shaped lamp is used, the weighting factor is obtained as shown in Fig. 6, and is represented by the following equation (5).

$$F_k = A_k / (\sigma_2^2 \pi - \sigma_1^2 \pi) \quad F_k' = A_k' / (\sigma_2^2 \pi - \sigma_1^2 \pi) \quad \dots (5)$$

Also, the average value of light intensity (\bar{I}) is calculated with the use of the following equation:

$$\bar{I} = \sum_{k=1}^N F_k' S_k' S_k'^*$$

wherein, " F_k' " is a weighting factor of diffracted light (a real number), and " S_k' " is the amplitude of the diffracted light (a complex number: an asterisk (*) represents a complex conjugate number), "k" representing the number of the diffracted light corresponds to the combination of (n,m) one to one. ("n" and "m" are the orders of diffracted light in X and Y directions, respectively.)